

Mountain LionFelis concolor

Family: Felidae, Order: Carnivora

Physical Appearance: length up to 9' nose to tip of tail, height up to 30" at shoulder, weight up to 200 lbs; color may be tawny, tan, golden, yellow, brownish, reddish, greyish and may be white below

Distribution: prevalent in patches throughout North America, Central America, South America

Habitat: desert to tundra, namely mid-elevation forests

Grand Canyon Country: healthy population North and South Rims, may be present well into canyon

Active: namely nocturnal (night) but a little diurnal (day) and crepuscular (dawn and dusk)

Prey Sources/Eating Habits: main staple mule deer (or the like), small mammals, wildfowl, fish, raccoons

Predators: none really, but humans and perhaps other lions

- largest of the small cats (Felis genus vs the big five Panthera genus)
- most widely spread wildcat geographically from North to South (Southern Alaska to Southern Argentina)
- more common names than any other wildcat (over thirty)
- purrs and chirps regularly with young (can't roar)
- mother may stay with young up to two years (a very long time for a major predator, usually only a year and a half or so)
- young called kittens not cubs
- · can run, jump, and climb exceptionally well



Bobcat

Felis rufus

Family: Felidae, Order: Carnivora

Physical Appearance: length up to 4' nose to tip of tail, height around 20" at shoulder, around 25lbs; color may be light grey to reddish-brown and may be whitish below

Distribution: Northern Mexico to Southern Canada

 $\textbf{Habitat:} \ \textbf{primarily mid-elevation forests, open areas, hilly or cliffy terrain, desert-like}$

Grand Canyon Country: healthy population North and South Rims, may be present well into canyon

Active: namely nocturnal (night) a little diurnal (day) and crepuscular (dawn and dusk)

Prey Sources/Eating Habits: main staple desert cottontail (or the like), also young deer, wildfowl, small mammals

 $\label{eq:predators:predators:} \textbf{Predators:} \ \ \text{none really, but humans and perhaps mountain lions, other bobcats}$

- closely related to lynx (which is found around the world as its own genus and varying species)
- called a bobcat due its "bobbed" tail (which ranges from 3-7")
- ears slightly tufted (modified hairs increasing sound absorption, etc.)
- probably most widely distributed wildcat demographically (by numbers) in United States



CoyoteCanis latrans

Family: Canidae, Order: Carnivora

Physical Appearance: length up to 4.5' nose to tip to tail, height around 25" at shoulder, weight up to 50lbs; color may be tannish, yellowish, greyish, brownish, or reddish and may be white below

Distribution: throughout contiguous United States and a little beyond

Habitat: desert to tundra

Grand Canyon Country: healthy population North and South Rims, may be present well into canyon

Active: throughout day (diurnal) and night (nocturnal) dawn and dusk (crepuscular)

Prey Sources/Eating Habits: young deer to small mammals; berries, nuts/seeds, plants, roots; will scavenge regularly on carrion (animal remains)

 $\label{eq:predators:none} \textbf{Predators:} \ \text{none really, but humans and perhaps other coyotes and mountain lions}$

- one of the most adaptable animals
- scientific name Canis latrans means barking dog, the coyote is a symbol of the Southwest popularized by its bark and yip
- may mate for life with the male taking an active role in raising young



Gray Fox

Urocyon cinereoargenteus

Family: Canidae, Order: Carnivora

Physical Appearance: length up to 3.8' nose to tip of tail, height around 15" at shoulders, weight around 13lbs; color dominantly gray but a lot of red evident and may be whitish below

Distribution: throughout United States (out-numbers red fox in the West)

Habitat: namely mid-elevation forests, hilly or cliffy terrain

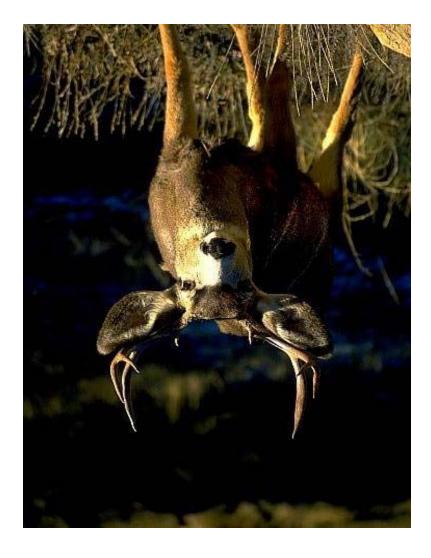
Grand Canyon Country: healthy population, not too common, present along both North and South Rims and well into canyon

Active: abroad diurnally (day), nocturnally (night), dawn and dusk (crepuscular)

 $\textbf{Prey Sources/Eating Habits:} \ main \ staple \ small \ mammals, \ also \ wild \ fowl, \ reptiles, \ amphibians, \ berries, \ seeds/nuts$

Predators: none really, but perhaps humans

- very cat-like, solitary and only member of the dog family (Canidae) in North America to readily climb trees
- may mate for life with the male taking an active role in raising young



Mule DeerOdocoileus hemionus

Family: Cervidae, Order: Artiodactyla

Physical Appearance: length up to 7.5' nose to tip of tail, height around 3.5' at rump, weight up to 450lbs; color ranges from tannish to dark brown (in summer) to lighter grey (in winter) and whitish on rump

Distribution: throughout Western United States and a little beyond

Habitat: desert-like to alpine/boreal forest

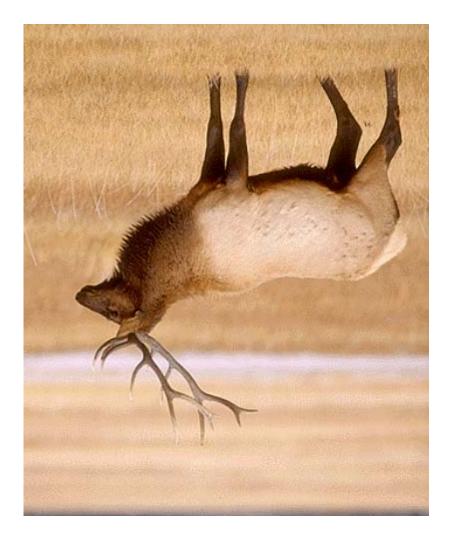
Grand Canyon Country: common along North and South Rims, may be present well into canyon

Active: namely crepuscular (dawn and dusk), abroad during day (diurnal)

Prey Sources/Eating Habits: strictly herbivorous (vegetation), primarily a browser (brush) but a little grazing (grass)

Predators: humans, mountain lions, bobcats, coyotes

- called a mule deer because of its "mule-like" ears
- the rut occurs during the fall when males try to impress the females and out-compete other males
- (solid) antlers not (hollow) horns, (shed) annually not kept, worn only by males (all members of the deer family (Cervidae) except reindeer/caribou where females have antlers too)
- most abundant ungulate (hoofed mammal) at Grand Canyon
- glands situated above hooves on mothers emit odor for fawns
- male is called a buck, female is called a doe, young is called a fawn



(Rocky Mountain) Elk Cervus elaphus

Family: Cervidae, Order: Artiodactyla

Physical Appearance: length up to 9' nose to tip of tail, height up to 5' at rump, weight up to 1000lbs; color ranges from tannish to dark brown and cream colored to yellowish rump

Distribution: Cervus elaphus, Rocky Mountain Region and a little beyond, (other elk species found elsewhere in United States and throughout North America)

Habitat: prefers wide open grassy areas such as meadows, low to high-elevations

Grand Canyon Country: somewhat common North and South Rims

Active: namely crepuscular (dusk and dawn) abroad during day (diurnal)

Prey Sources/Eating Habits: strictly herbivorous (vegetation), primarily a grazer (grass) but a little browsing (brush)

Predators: pretty much just humans, but young at risk to mountain lions, bobcats, coyotes

- most vocal ungulate (hoofed mammal), bugling, grunting, barking sounds; third largest ungulate in North America (bison, moose, elk), largest on Colorado Plateau (now, no longer any wild bison)
- (solid) antlers not (hollow) horns, (shed) annually not kept, worn only by males (all members of the deer family (Cervidae) except reindeer/caribou where females have antlers too)
- the rut is exemplified by elk and occurs during the fall, males try to impress females and out-compete other males
- male is called a bull, female is called a cow, young is called a calf



(Desert) Bighorn Sheep

Ovis canadensis

Family: Bovidae, Order: Artiodactyla

Physical Appearance: length up to 6' nose to tip of tail, height around 3.5' at rump, weight up to 300lbs; color ranges from grey, tannish, brownish, with white snout and rump

Distribution: namely Rocky Mountains and a little beyond

Habitat: cliffy and rocky terrain

Grand Canyon Country: somewhat common along canyon cliffs and slopes, rim to river

Active: pretty much throughout the day (diurnal), a little dawn and dusk (crepuscular)

Prey Sources/Eating Habits: strictly herbivorous (vegetation), grazing (grass) and browsing (brush)

Predators: humans, mountain lions, bobcats, golden eagles (may go after young)

- symbol of rugged durability
- · special hoof design to grip rocks
- (hollow) horns not (solid) antlers, kept throughout the animals life (not shed) annually, worn by males and females (all members of the sheep family (*Bovidae*) males continue to curl around 'till about 7 years of age then add girth only, females about 4-6")
- male is called a ram, females is called a ewe, young is called a lamb



Pronghorn (Antelope)

Antilocarpa americana

Family: Antilocapridae, Order: Artiodactyla

Physical Appearance: length around 4.5' nose to tip of tail, height up to 3.5' at rump, weight around 125lbs; color ranges from tannish, brownish, reddish, orangish on white

Distribution: patchy throughout Western and Midwestern United States (namely Arizona, Oregon)

 $\textbf{Habitat:} \ \text{wide open prairies, grasslands, desert-like}$

Grand Canyon Country: uncommon South Rim

Active: abroad during day (diurnal) may be active at night (nocturnal)

Prey Sources/Eating Habits: strictly herbivorous (vegetation), grazing (grass) and browsing (brush)

Predators: namely coyotes, wild/feral dogs, golden eagles (may go after young)

- fastest land animal in Western Hemisphere (readily runs up to 40mph, some may sprint peak near 70mph)
- · horns (not antlers) very unique since they are "pronged" and the outer portion is shed annually
- only member of its own family Antilocapridae
- some accept the term antelope while others claim not a member of the "true antelope family" so simply pronghorn



(Common) Raven

Corvus corax

Family: Corvidae

Physical Appearance: length around 2', wingspan around 4.5'; color is basically black on flat black, a little iridescence may be present

Distribution: throughout North America, namely Western United States

Habitat: desert to tundra

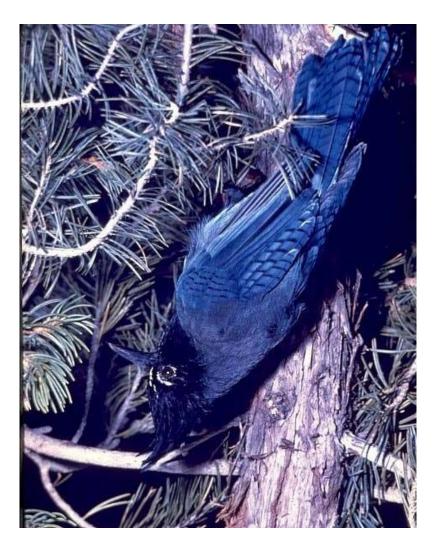
Grand Canyon Country: common North and South Rims, also present throughout canyon

Active: throughout the day (diurnal), dawn and dusk (crepuscular)

Prey Sources/Eating Habits: mainly an opportunistic scavenger, omvivorous (vegetation and meat), pinion nuts, juniper berries, and carrion (animal remains)

Predators: rarely a goal, but any avid predator such as bobcat, ringtail

- very intelligent, (a trait of the corvids Corvidae family members) easily comparable to cats, dogs, dolphins
- one of the most adaptable birds (or animals in general)
- not the same as (American) crow, here are some helpful clues to help differentiate; 25% larger, more calls, more
 dramatic curving bill, often but not always a more wedge-shaped tail, throat and nape feathers more shaggy, and
 soars (more readily)



Steller's Jay Cyanocitta stelleri

Family: Corvidae

Physical Appearance: length around 11", wingspan around 18"; color is a vivid iridescent blue on black; noticeable crest on head (only Western Jay with crest)

Distribution: Southern Alaska throughout Western United States

Habitat: namely mid to upper-elevation forests

Grand Canyon Country: somewhat common North and South Rims

Active: namely diurnal (day), crepuscular (dawn and dusk)

Prey Sources/Eating Habits: fruits, nuts/seeds, and some insects, may scavenge

Predators: various birds of prey (i.e. sharp-shinned hawks, cooper's hawks, goshawks) maybe feral cats

- a keen mimicker (often red-tailed hawks and ravens)
- noticeable corvid (Corvidae family members) intelligence
- quite adaptable to humans



(Western) Scrub Jay Aphelocoma californica

Family: Corvidae

Physical Appearance: length around 11", wingspan around 16"; color is a blue base, intermeshed with black, grey, and white

Distribution: mainly Western United States

Habitat: foothill woodland, chaparral, to mid-elevation forest

Grand Canyon Country: common North and South Rims

Active: by day (diurnal), crepuscular (dawn and dusk)

 $\textbf{Prey Sources/Eating Habits:} \ \text{fruits, nuts/seeds, and some insects, may scavenge}$

Predators: various birds of prey (i.e. sharp-shinned hawk, cooper's hawk, goshawk) maybe feral cats

- may cache (store) nuts/seeds for later
- noticeable corvid (Corvidae family members) intelligence



Western Bluebird

Sialia mexicana

Family: Muscicapidae, Subfamily: Turdidae

Physical Appearance: length around 7"; color of male deep dark blue, stark orange to red breast, female lighter blue, lighter orangish breast

Distribution: Southern British Columbia South throughout Western United States to mid Mexico

Habitat: forests, scrublands, orchards, some desert-like

 $\textbf{Grand Canyon Country:} \ common \ North \ and \ South \ Rims$

Active: by day (diurnal), dawn and dusk (crepuscular)

Prey Sources/Eating Habits: namely insects, a little fruits, nuts/seeds

Predators: various birds of prey (i.e. sharp-shinned hawk, cooper's hawk, goshawk) maybe feral cats

- vivid and brightly colored
- nests in holes more often or rather than nests
- melodic song



California Condor

Gymnogyps californianus

Family: Cathartidae

Physical Appearance: length up to 55", wingspan up to 9.5'; full maturity reached around 6 yrs where color is stark black overall, vivid white underneath toward front of wing, pink unfeathered head, neck, crop, and legs

 $\textbf{Distribution:} \ \text{small patches throughout California, mid Rockies, 4 corners states}$

Habitat: desert-like or canyon lands, open terrain

Grand Canyon Country: throughout park from river to rims

Active: by day (diurnal), dawn and dusk (crepuscular)

Prey Sources/Eating Habits: strict scavenger of carrion (animal remains)

Predators: none really, 3 main threats are, humans, coyotes, golden eagles

- · largest free-flying land bird in North America
- very social and nurturing
- endangered species
- helped pave the way and set new standards for reintroduction agencies and programs



Turkey Vulture *Cathartes aura*

Family: Cathartidae

Physical Appearance: length around 24", wingspan around 5.5'; full maturity reached around 5 yrs where color is light brown to dark brown to light black overall, grey underneath toward rear of wing, reddish head and neck

Distribution: patchy or migratory over all of contiguous United States

Habitat: open country, desert-like, some forest

Grand Canyon Country: throughout park from river to rims

Active: by day (diurnal), crepuscular (dawn and dusk)

Prey Sources/Eating Habits: strict scavenger of carrion (animal remains)

Predators: none really, threats may include other scavengers and humans

- · may have the most prominent olfactory nerve sensors on the planet, allowing them to smell carrion miles away
- as with other scavengers, plays a unique and important role in the ecosystem



Red-tailed Hawk Buteo jamaicensis

Family: Accipitridae

Physical Appearance: length around 1.5', wingspan around 4.0'; color is golden brown overall head, darkening brown back and top-side wing, bottom-side wing brownish with interweaving white, chest golden to dark brown, tail top-side deep red, bottom-side tail orangish red

Distribution: patchy throughout entire contiguous United States (migrates well beyond)

 $\textbf{\textit{Habitat:}} \ \textit{virtually all terrestrial environments and habitats, benefiting most from open terrain}$

 $\textbf{Grand Canyon Country:} \ \text{somewhat common, often seen soaring over open canyon}$

Active: throughout day (diurnal bird of prey), crepuscular (dawn and dusk)

Prey Sources/Eating Habits: namely rodents and other small mammals

 $\label{eq:predators:none} \textbf{Predators:} \ \text{none really, main threat may be humans}$

- called red-tailed hawk because of vibrant red tail
- most abundant and popular (buteo-type) hawk in United States
- classic hawk-like call, dramatic descending "keeeeer"



Zone-tailed Hawk *Buteo albonotatus*

Family: Accipitridae

Physical Appearance: length around 2.0', wingspan around 4.0'; color is greyish black overall, bottom-side whitish to rear of wing, tail has variable number of greyish bands (usually 3 or 4)

Distribution: namely in Southwest

Habitat: namely forested canyons and riverside woodlands

Grand Canyon Country: somewhat uncommon

Active: throughout day (diurnal bird of prey), crepuscular (dawn and dusk)

Prey Sources/Eating Habits: rodents and other small mammals, small birds, lizards, fish

Predators: none really, main threat may be humans

- called zone-tailed hawk because of greyish bands on tail
- has learned/adapted to imitate the turkey vulture (while in flight)



Bald Eagle

Haliaeetus leucocephalus

Family: Accipitridae

Physical Appearance: length around 3', wingspan around 7'; color is stark black overall, white head, white tail

Distribution: Alaska, Pacific Northwest and a little South, Rockies and a little South, patchy throughout Midwest, New England

Habitat: dominantly lakes, rivers, sea coasts

Grand Canyon Country: somewhat common along certain areas/segments of the river

Active: throughout day (diurnal bird of prey), dawn and dusk (crepuscular)

Prey Sources/Eating Habits: namely fish, will occasionally scavenge carrion (animal remains)

Predators: none really, main threat may be humans

- our National Symbol (ironic that here in the United States, humans brought them to near extinction, due to mainly pesticides)
- called a bald eagle due to dramatic white head emerging from stark black body
- was endangered, is now a threatened species



Golden Eagle

Aquila chrysaetos

Family: Accipitridae

 $\textbf{Physical Appearance:} \ length \ around \ 2.5', wingspan \ around \ 6.5'; \ light \ to \ dark \ tawny \ golden \ brown \ throughout$

Distribution: Rocky Mountain states, patchy to Pacific

 $\textbf{Habitat:} \ forest \ to \ open \ plains/grasslands$

Grand Canyon Country: uncommon

Active: throughout day (diurnal bird of prey), dawn and dusk (crepuscular)

Prey Sources/Eating Habits: rodents and other small mammals, will occasionally scavenge carrion (animal remains)

Predators: none really, main threat may be humans

- golden brown color responsible for name
- very territorial (chasing others animals/birds away to dominate area with own kind)



Peregrine Falcon Falco peregrinus

Family: Falconidae

Physical Appearance: length around 1.5', wingspan around 3.5'; color is white to creamy overall intermixed with bold black to grey bottom-side, dominantly blackish grey top-side, well-defined black "helmet" or "hood" is distinctive

Distribution: spotty Western United States, Rockies, Midwest, Eastern United States

Habitat: open areas, namely coasts, lakes, wetlands, canyons

Grand Canyon Country: somewhat common in certain parts of the canyon

Active: by day (diurnal bird of prey), crepuscular (dawn and dusk)

Prey Sources/Eating Habits: primarily (other) small to medium-sized birds

Predators: none really, main threat may be humans

- fastest diving bird in the world (perhaps up to 200 mph)
- symbol of the falcons
- · was an endangered then threatened species (humans brought them to near extinction, due to mainly pesticides)



Great Horned Owl

Bubo virginianus

Family: Strigidae

Physical Appearance: length around 2', wingspan around 4'; color is white intermixed with light to dark grey or light tan to dark brown

Distribution: found in patches throughout entire United States

Habitat: namely forests (clearings), some desert-like

Grand Canyon Country: somewhat common North and South Rims

Active: primarily night (nocturnal bird of prey)

Prey Sources/Eating Habits: primarily rodents, some other small mammals

Predators: none really, main threat may be humans

- silent wing design (key for night hunting)
- symbol of wisdom
- most abundant and popular owl in North America
- · called a horned owl because of dramatic ear-tufts



Violet-green Swallow Tachycineta thalassina

Family: Hirundinidae

Physical Appearance: length around 5"; color is white undertones, pale creamy green top, beautiful and vibrant iridescent green back, violet on upper side of tail

Distribution: in patches throughout Western United States

 $\textbf{Habitat:} \ \text{namely forests and woodlands}$

Grand Canyon Country: somewhat common North and South Rims

Active: by day (diurnal), crepuscular (dawn and dusk)

Prey Sources/Eating Habits: primarily insects

Predators: none really, maybe some birds of prey

- wonderful flier
- gets its name from its green back and violet tail
- tend to live in colonies
- nest in tree or cliff crevices



Rock Squirrel Spermophylus variegatus

Family: Sciuridae, Order: Rodentia

Physical Appearance: length around 21" nose to tip of tail, weight around 28 oz; color is mottled grey to tan to brownish above intermixed with white spots, whitish below, bushy tail

Distribution: 4 corners states and a little beyond

Habitat: sparse vegetation, cliffs and canyons

Grand Canyon Country: common North and South Rims

Active: throughout day (diurnal), crepuscular (dawn and dusk)

Prey Sources/Eating Habits: nuts/seeds, fruits, may scavenge carrion (animal remains)

Predators: grey fox, bobcat, snakes, golden eagles

- very social (often colonial) don't feed or pet wildlife in National Parks for their benefit and yours
- great climber
- may cache (store) food for later
- largest ground squirrel on Colorado Plateau (and hence at Grand Canyon)
- probably most abundant ground squirrel at Grand Canyon
- called a rock squirrel due to its commonality and speciality in rocky areas



Abert's Squirrel

Sciurus aberti

Family: Sciuridae, Order: Rodentia

Physical Appearance: length around 22" nose to tip of tail, weight around 32oz; color is light grey on top with a prominent reddish brown patch, white underside, bushy tail

Distribution: basically 4 corners states

Habitat: (ponderosa pine) forests

Grand Canyon Country: somewhat common South Rim

Active: by day (diurnal), dawn and dusk (crepuscular)

Prey Sources/Eating Habits: nuts, seeds, fruit, buds, young branch shoots, inner bark/outer bole, a little fungi

 $\textbf{Predators:}\ goshawks,\ cooper's\ hawks,\ sharp-shinned\ hawks,\ bobcats$

- · called a tassel-eared squirrel due to tufts (or "tassels", modified hairs increasing sound absorption) on ears
- unique relationship with ponderosa pine trees (the importance of an individual tree and type of tree to wildlife)
- will cache (store) food for later
- largest tree squirrel South Rim Grand Canyon
- most abundant tree squirrel South Rim Grand Canyon
- rarely melanistic (coloration all black)



Kaibab Squirrel

Sciurus kaibabensis

Family: Sciuridae, Order: Rodentia

Physical Appearance: length around 22" nose to tip of tail, weight around 32oz; dark grey on top with a prominent reddish brown patch, greyish underside, bushy tail

Distribution: North Rim Grand Canyon National Park

Habitat: (ponderosa pine) forests

Grand Canyon Country: somewhat common North Rim

Active: by day (diurnal), dawn and dusk (crepuscular)

Prey Sources/Eating Habits: nuts, seeds, fruit, buds, young branch shoots, inner bark/outer bole, a little fungi

Predators: goshawks, cooper's hawks, sharp-shinned hawks, bobcats

- called a tassel-eared squirrel due to tufts (or "tassels", modified hairs increasing sound absorption) on ears
- unique relationship with ponderosa pine trees (the importance of an individual tree and type of tree to wildlife)
- will cache (store) food for later
- largest tree squirrel North Rim Grand Canyon
- endemic (found only at one place) to North Rim Grand Canyon National Park



Deer Mouse

Peromyscus maniculatus

Family: Muridae, Order: Rodentia

Physical Appearance: length around 7" nose to tip of tail, weight around 1oz; color is greyish to brownish to reddish above, whitish below

Distribution: all over North America, except for a few Southern States

Habitat: desert to tundra, may prefer prairies/grasslands

 $\textbf{Grand Canyon Country:} \ common \ North \ and \ South \ Rims$

Active: dominantly nocturnal (night)

 $\textbf{Prey Sources/Eating Habits:} \ \textbf{nuts/seeds}, \ \textbf{fruit}, \ \textbf{fungus}, \ \textbf{perhaps an insect/small bug or two}$

Predators: any small to medium sized bird of prey or cat or dog, most weasels

- good climber
- subfamily Sigmodontinae
- will cache (store) food for later
- internal cheek pouches for carrying food



Western Spotted Skunk

Spilogale gracilis

Family: Mustelidae, Order: Carnivora

Physical Appearance: length around 16" nose to tip of tail, weight a little less than 2lbs; color is basically vivid white on a sheer black

Distribution: basically Western United States

Habitat: open plains to dense forest

Grand Canyon Country: namely inner canyon

Active: primarily nocturnal (night)

Prey Sources/Eating Habits: in sects, small birds, small mammals; may nibble on some seeds/nuts, berries

Predators: great horned owls and other nocturnal birds of prey, coyotes

- based in Western United States and intermingling splashes of white spots and stripes give it its name
- in the weasel family (Mustelidae), weasel-based scent glands are specialized/highly developed in skunks and are
 used to spray foul-smelling fluid in defense; before spraying, they perform a unique dance on their forepaws
- smaller, faster, more agile than striped skunks



Striped Skunk

*Memphitis memphitis*Family: Mustilidae, Order Carnivora

Physical Appearance: length around 25" nose to tip of tail, weight a little less than 15lbs; color is basically vivid white on a sheer black

Distribution: throughout United States

Habitat: open plains to dense forest

Grand Canyon Country: somewhat common South and North Rims

Active: primarily nocturnal (night)

Prey Sources/Eating Habits: insects, small birds, small mammals; may nibble on some seeds/nuts, berries

Predators: great horned owls and other nocturnal birds of prey, coyotes

- basically two large white stripes running down back give it its name
- in the weasel family (Mustelidae), weasel-based scent glands are specialized/highly developed in skunks and are used to spray foul-smelling fluid in defense; ironically, the "musk" from the fluid is sometimes used as a perfume base because of its clinging qualities



Ringtail

Bassariscus astutus

Family: Procyonidae, Order: Carnivora

Physical Appearance: length around 28" nose to tip of tail, weight around 2lbs; color is greyish to yellowish to brownish to reddish, tail bands blackish, may be whitish below

Distribution: Southwest and a little beyond

 $\textbf{Habitat:} \ namely \ desert-like, \ rocky/cliffy \ areas, \ may \ seek \ out \ riparian \ (water \ loving) \ environments$

Grand Canyon Country: namely inner canyon

Active: namely nocturnal (night)

Prey Sources/Eating Habits: small mammals, small birds, lizards, insects; may nibble on some seeds/nuts, fruit

Predators: great horned owl and other nocturnal birds of prey, bobcats

- in the raccoon family (*Procyonidae*) but very cat-like (hence the misleading name "ring-tailed cat"), a little dog-like, a little weasel-like (may secrete a foul-smelling liquid in defense), a little rodent-like
- dramatic beautiful banded tail
- great climber



Common Porcupine

Erethizon dorsatum

Family: Erethizontidae, Order: Rodentia

Physical Appearance: length around 33" nose to tip of tail, weight around 16lbs; color is brownish to black on grey, with slivers of white

Distribution: patchy throughout Western United States, Midwest, and New England

Habitat: namely forest

 $\textbf{Grand Canyon Country:} \ \text{somewhat common North and South Rims}$

Active: mainly nocturnal (night), but may be abroad during day (diurnal), crepuscular (dawn and dusk)

Prey Sources/Eating Habits: strictly herbivorous (vegetation), young plants, grasses, branch shoots, buds, inner bark/outer phloem

Predators: uniquely fishers and some other weasel-like critters, perhaps a mountain lion or bobcat

- only member of its own family Erethizontidae
- defensive protection in the form of modified hairs, spines, and quills
- good climber
- namely rodent-like, a little weasel like (may be able to produce skunk-like defensive odors)



Desert Cottontail

Sylvilagus audubonii Family: Leporidae, Order: Lagomorpha

Physical Appearance: length around 15" nose to tip of tail, weight a little less than 3lbs; color ranges from light grey to reddish brown, whitish below

Distribution: present in patches throughout Western United States

Habitat: namely desert-like, some grassland

Grand Canyon Country: common South Rim

Active: day (diurnal), dawn and dusk (crepuscular), night (nocturnal)

Prey Sources/Eating Habits: strictly herbivorous (vegetation), grasses, young plants, buds, branch shoots, inner bark/outer phloem

Predators: bobcats, coyotes, foxes, birds of prey

- (at South Rim Grand Canyon National Park) if someone sees a "bunny", they saw a desert cottontail
- good runner (around 15mph)
- may thump hind leg when excited
- good sense of smell
- called a cottontail due to its cotton-puff looking tail



Black-tailed Jackrabbit

Lepus californicus

Family: Leporidae, Order: Lagomorpha

Physical Appearance: length around 24" nose to tip of tail, weight a little less than 8lbs; color ranges from light grey to reddish brown, whitish below

Distribution: present in patches throughout Western United States

 $\textbf{Habitat:} \ \text{desert-like}, \ \text{grassland}, \ \text{and} \ \text{forest}$

 $\textbf{Grand Canyon Country:} \ common \ South \ Rim, \ somewhat \ uncommon \ North \ Rim$

Active: day (diurnal), dawn and dusk (crepuscular), night (nocturnal)

Prey Sources/Eating Habits: strictly herbivorous (vegetation), grasses, young plants, buds, branch shoots, inner bark/outer phloem

Predators: bobcats, coyotes, foxes, birds of prey

- (at South Rim Grand Canyon National Park) if someone sees a "rabbit", they saw a black-tailed jackrabbit
- good runner, kind of a hopping run (35mph)
- dramatic ears aid in hearing and cooling
- good sense of smell
- may thump hind leg when excited



Black Bear

Ursus americanus

Family: Ursidae Order: Carnivora

Physical Appearance: length up to 6.5' nose to tip of tail, height up to 4.0' at shoulder, weight up to 600lbs; color may be black, brown, tawny, cinnamon

Distribution: patchy across most of North America

Habitat: namely forest

Grand Canyon Country: somewhat rare North and South Rims

Active: mainly nocturnal (night), a little crepuscular (dawn and dusk), may be abroad during day (diurnal)

Prey Sources/Eating Habits: primarily herbivorous (vegetation), twigs, buds, branch shoots, inner bark/outer phloem, fruits/berries; also carnivorous (meat) grubs, insects, bugs, fish, small mammals

Predators: none really, but humans and perhaps other bears

- will claw and rub against trees, also a good climber
- good swimmer
- · not a true hibernater, but do something biologically similar



Humpback Chub Gila cypha

Physical Appearance: length around 18" nose to tip of tail, large fins, small eyes, fleshy snout; color is olive green back, silver sides, white belly

Distribution: Colorado River basin

Habitat: preferably warmer, fast moving, swift currents, turbid waters

Grand Canyon Country: namely Little Colorado River, but some throughout main stem of Colorado River

Active: namely diurnal (day)

Prey Sources/Eating Habits: insects, algae, diatoms (one-celled algae-like critters)

Predators: other fish, especially exotic/introduced trout

- prominent rounded hump on back behind head give it its name
- · in the minnow family
- Endangered Species, federally protected since 1964, placed on the Endangered Species List when Endangered Species Act enacted 1973, in Arizona, noted as wildlife of special concern



Kaibab Swallowtail Papilio indra kaibabensis

Physical Appearance: wingspan up to 3"; color is black with splashes of vivid yellows and varying hues of blues, short tails (*indra* in general lots of geographic variation)

Distribution: North Rim Grand Canyon National Park (indra in general basically Western United States)

Habitat: as a subspecies, very isolated at North Rim (*indra* in general prefers alpine/boreal forest to desert-like)

Grand Canyon Country: North Rim

Active: namely by day (diurnal)

Prey Sources/Eating Habits: edges of leaves, nectar

 $\label{eq:predators:predators:predators} \textbf{Predators:} \ \text{human gatherers/collectors, some spiders and birds}$

- Papilio indra is the indra swallowtail
- we are calling *kaibabensis* a subspecies of *Papilio indra* (there are other views)
- we are calling it the kaibab swallowtail (there are other views)
- information on butterflies and on this one in particular is extremely hard to come by due to a butterfly collecting underworld
- endemic (found only at one place) to North Rim Grand Canyon National Park



Collared Lizard Crotaphytus collaris

Physical Appearance: length up to 14" nose to tip of tail; color is tannish, light greenish to vivid green, turquoise, blue, with yellows, oranges, reds

Distribution: patchy throughout United States

Habitat: desert-like (namely true desert)

Grand Canyon Country: inner canyon, mainly around Tonto Plateau

Active: namely by day (diurnal)

 $\textbf{Prey Sources/Eating Habits:} insects, smaller \ \textbf{lizards} \ and \ \textbf{reptiles}, \ \textbf{a little plant material}$

Predators: birds, snakes, other lizards, coyote, fox, perhaps a wild or feral dog or cat

- males brighten seasonally to the vivid hues to attract a female/mate, females tend to remain their base color but may take on a seasonal orangish and/or salmon-colored spots
- can run well on their hind legs
- wave their tail much like a cat when "stalking" prey
- black bands around neck give it its name



Short-horned Lizard *Phrynosoma douglassii*

Physical Appearance: length up to 5.5"; color is brown, tan, grey, sometimes colorful blotches of reds, oranges, yellows

Distribution: basically Western United States

Habitat: desert-like to alpine/boreal forest

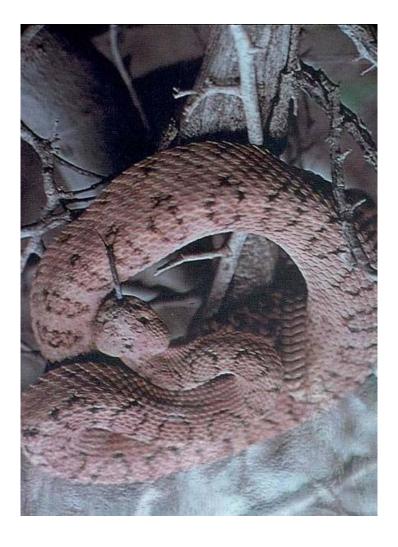
Grand Canyon Country: somewhat common North and South Rims and a hair below

Active: namely diurnal (day)

Prey Sources/Eating Habits: primarily ants, maybe some beetles

Predators: birds, snakes, other lizards, coyote, fox, perhaps a wild or feral dog or cat

- excellent camouflage (to blend in with ground, rocks)
- small horns (or horn-like spines, scales) prominent but smaller than other horned lizards, responsible for name
- may play dead, inflate themselves, or shoot blood-like liquid out of eye(s) to defend itself



Grand Canyon (Pink) Rattlesnake Crotalus viridis abyssus

Physical Appearance: length up to 3.5'; color is sandy, brownish, vermillion, salmon-pink

Distribution: small section inner canyon Grand Canyon National Park (viridis in general Western United States)

Habitat: as a subspecies isolated to inner canyon (viridis in general desert-like to alpine/boreal forest)

Grand Canyon Country: river corridor, usually not much above Tonto Plateau

Active: tends to be heat related, roughly nocturnal (night) during summer, diurnal (day) during winter

 $\textbf{Prey Sources/Eating Habits:} \ \textbf{small mammals, small reptiles, small birds}$

 $\textbf{Predators:} \ \mathsf{birds}, \ \mathsf{ringtails}, \ \mathsf{weasels}$

- Crotalus viridis is the Western rattlesnake (a pit viper, having a rattle)
- abyssus is a subspecies of Crotalus viridis
- pinl
- endemic (found only at one place) to small section inner canyon Grand Canyon National Park



Western Pipistrelle (Bat)

Pipistrellus hesperus

Family: Vespertilionidae

Physical Appearance: length around 3", wingspan around 8"; color is greyish, tannish, brownish, reddish body, black face, membranes, and wings, may have whitish belly

Distribution: patchy throughout Western United States

Habitat: desert-like, canyons, cliffs, waterways, a little forest

Grand Canyon Country: somewhat common throughout park, river to rims

Active: namely nocturnal (night), a little crepuscular (dawn and dusk), a little diurnal (day)

Prey Sources/Eating Habits: insects

Predators: main threat may be humans

- bats in general are the only true flying mammal
- smallest bat in United States (if not North America)
- quite solitary as bats go
- · one of the more diurnal of bats
- one of the more abundant of bats at Grand Canyon National Park (if not Western United States)



Bark Scorpion Centruroides exilicauda

Physical Appearance: length around 2.5"; color is yellowish, straw colored

Distribution: Southwest

Habitat: desert-like (namely true desert)

Grand Canyon Country: somewhat common inner canyon (namely along river corridor)

Active: namely nocturnal (night)

Prey Sources/Eating Habits: insects

Predators: lizards, snakes, (grasshopper) mice, (pallid) bats

- most venomous scorpion in North America
- young stay on mom's back about 2 weeks before venturing out into world
- scorpions in general glow/fluoresce when shinned by ultraviolet light



Desert Tarantula *Aphonopelma chalcodes*

 $\textbf{Physical Appearance:} \ length \ of female \ around \ 4.0", length \ of \ male \ around \ 2.5"; \ color \ is \ blondish, \ reddish, \ blackish$

Distribution: Southwest

Habitat: namely desert-like, a little forest

Grand Canyon Country: somewhat rare river to rims

Active: namely nocturnal (night)

Prey Sources/Eating Habits: insects, lizards, tiny mammals

Predators: lizards, snakes, tarantula hawks (wasps)

- tarantulas in general are the largest members of the spider family *Theraphosidae*
- males will seasonally go on a quest, venturing all around to females lying in wait in their burrows
- bite is mild, venom is weak, hair-like bristles on abdomen detach and are irritating/itching to those with whom they
 come in contact



Canyon Tree Frog

Hyla arenicolor

Family: Hylidae, Order: Salientia

Physical Appearance: $1\frac{1}{4}$ - $2\frac{1}{4}$ in. long; olive to brownish grey with darker blotches; somewhat warty; large toe pads; under thigh yellow to orange

Distribution: S Utah to central Colorado, south to Mexico

Habitat: dry areas near streams or pools

Grand Canyon Country: side canyons with perennial (year-round) streams or pools

Active: primarily nocturnal (night)

Prey Sources/Eating Habits: insects, bugs, spiders, worms (insectivore)

Predators: carnivorous mammals, birds, snakes

Fun Facts:

Hides in rocks near streams during the heat of the day

• Primarily dwells at ground level but occasionally climbs trees



Desert Tortoise

Gopherus agassizii

Family: Testudinidae, Order: Testudines

Physical Appearance: 9-14 in. length; domed shell and scaly legs, front limbs flattened; head small and rounded, reddish tan color; eyes greenish yellow

Distribution: SE California, southern Nevada, western Arizona

Habitat: dry, sandy or rocky areas

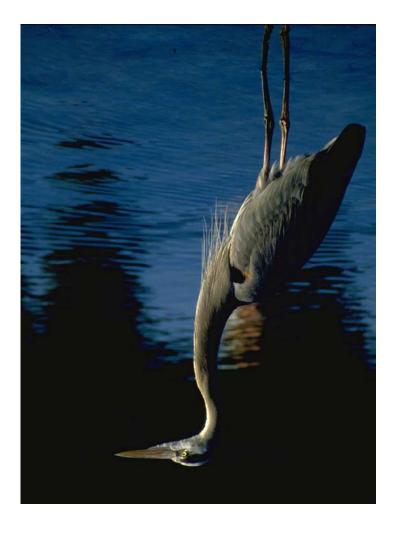
Grand Canyon Country: western end Inner Canyon

Active: crepuscular (dawn and dusk)

Prey Sources/Eating Habits: feeds primarily on grasses and herbs (herbivore)

Predators: ravens prey on young; human development has threatened habitat

- Maturity reached in 15-20 years—can live up to 100 years
- Front limbs are flattened for digging
- Can create horizontal tunnels up to 30 feet long
- Temperatures in burrows can be 20+ degrees cooler than outside air temperature
- May spend 95% of its life underground



Great Blue Heron

Ardea herodias

Family: Hylidae, Order: Salientia

Physical Appearance: 40-52 in. long; very large wading bird with long legs; long, sharp, yellowish bill; gray-blue body and white head with black plumes

Distribution: Winter range includes Mexico, Central America, and lower half of US; Summer range includes all of US and S Canada

Habitat: aquatic/riparian in areas of shallow water

Grand Canyon Country: Colorado River

Active: diurnal (day)

Prey Sources/Eating Habits: primarily fish and frogs (carnivore)

Predators: hawks, foxes, raccoons (mostly prey on young)

- Builds large nests in tall trees near water
- · Uses sharp, long bill to spear prey
- Wades in shallow water to search for prey
- Can live in salt or freshwater environments



Kanab Amber Snail

Oxyloma haydeni kanabensis

Family: Succineidae, Order: Stylommatophora

Physical Appearance: shell is up to 1 in. long and amber (dark) colored; flesh is golden to dark brown

Distribution: only two known populations in the world—one near Kanab, Utah, and the other at Grand Canyon

 $\textbf{Habitat:} \ wetlands, \ springs, \ and \ seeps \ amongst \ vegetation \ at \ waters \ edge$

Grand Canyon Country: Vasey's Paradise

Active: dormant during winter months

Prey Sources/Eating Habits: uses a rough tongue-like mouth part to scrape bacteria, fungi, and algae off of aquatic vegetation

Predators: possibly trout, toads, tree frogs, and some birds

- Listed as endangered
- Considered to be relicts from the Pleistocene age when wetlands were more abundant in the Southwest
- Most individuals possess both male and female reproductive organs—can self-fertilize
- Retreat into shells and become dormant during winter months



Common Merganser

Mergus merganser

Family: Anatidae, Order: Anseriformes

Physical Appearance: average length 25 in. Duck with slim neck and thin, hooked red bill. White breast and sides with some black on wings. Female has crested, rust colored head; male has green head with no crest.

Distribution: Winter range is throughout the U.S. excluding the SE states. Summer range includes most of Canada, southern Alaska, and most Western states south to N Arizona.

Habitat: riparian (waterways)

Grand Canyon Country: Colorado river (year round resident)

Active: diurnal (daytime)

Prey Sources/Eating Habits: Diving bird: eats fish, crustaceans, and aquatic insects (carnivore/insectivore)

Predators: raptors (birds of prey) and raccoons may raid nests

- One of the largest species of ducks in North America
- Beak has serrated edge to help grab on to slippery fish
- Prefers to nest in tree cavities 15-20 feet above ground
- Males often leave the female after eggs have been laid



BeaverCastor canadensis

Family: Castoridae, Order: Rodentia

Physical Appearance: length 2.5 - 4' (nose to tip of tail), weight 30-60 lbs; color is rich brown throughout body; flattened, scaly tail; huge front teeth; hind feet are webbed.

Distribution: found throughout North America

Habitat: riparian (waterways)

Grand Canyon Country: Colorado river and side canyons

Active: mostly nocturnal (night)

Prey Sources/Eating Habits: willows and other trees (feeds on inner bark, leaves and small twigs), some grasses and ferns (herbivore)

Predators: human hunters (trappers); coyotes, hawks, and owls will occasionally eat young kits

- Front teeth (incisors) never stop growing
- Beavers have scent glands that contain liquids sometimes used to make perfume
- Special valves are located on mouth, ears, and nostrils to keep water out while swimming
- Lodges are built out of branches and mud; inside living space is usually accessible only by swimming underwater
- Beaver pelts (skins) were very valuable in the 1800s and widespread trapping caused many beaver
 populations to shrink dramatically. Beaver trapping brought many of the first European settlers to the
 Grand Canyon. (Today, you cannot trap beavers inside the park)